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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,741

12/10/2003

Thomas M. Schmitt

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11/21/2006

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EXAMINER

SINGH, ANOOP KUMAR

ART UNIT

PAPER NUMBER

1632

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<b>Application No.</b> 10/731,741	<b>Applicant(s)</b> SCHMITT ET AL.	
	<b>Examiner</b> Anoop Singh	<b>Art Unit</b> 1632	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1,2,4,8,10-17,22 and 24.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

PETER PARAS, JR.  
 SUPERVISORY PATENT EXAMINER  
 TECHNOLOGY CENTER 1600

*Pete Paras*

Continuation of 3: The amendment to claims 1 raises new issues that require further consideration. Applicant has amended claim 1 to read on cell preparation comprising OP9 stromal cells that have been modified to express Notch ligand that supports T cell lymphopoiesis but does not support B cell lymphopoiesis of "stem cell or progenitor cell". This amendment changes the breadth of the claim 1.

Continuation of 11: The Examiner maintains the rejection of claims 1, 2, 4, 8, 10-17, 22 and 24 for the reasons of record. To the extent arguments apply to the pending claims, Applicant arguments filed on 10/30/2006 have been fully considered but they are not fully persuasive. Applicants rebut the rejection of the claims under 35 USC 112 and 35 USC 103, in the reply filed 10/30/2006. Applicants arguments based on the proposed amendments are not persuasive, because the claim amendments have not been entered and require new consideration and search. Claims 1, 2, 4, 8, 10-17, 22 and 24 remain rejected under under 35 USC 112, first paragraph, as failing to comply written description requirement.

Claims 1,2,4,8,10-17, 22, 24 remain rejected under 35 U.S.C. 112, second paragraph, as being incomplete indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1,2,4,8 and 12-15, 17, 22, remain rejected under 35 U.S.C. 103(a) as being unpatentable over Jaleco et al. {Jaleco et al. (2001) J. Exp. Med. 194:991-1001}, in view of Nakano et al. {Nakano et al. (1994) Science 265:5175} and Tatsumi et al. {Tatsumi et al. (1990) Proc. Natl. Acad. Sci. 87:2750-2754}. Applicant argues that the cited references fails to describe the necessary disclosure or motivation required to teach an in vitro system that supports T cell lymphopoiesis using OP9 cells modified to express Delta-like-1 or Delta-like-4. In response, it is emphasized that the argued limitations present in the specification are not present in the claims as recited. Further, applicants have amended the claims to read specifically on a method of making CD4+ CD8+ T cells. Jaleco et al. specifically teaches an in vitro system to produce CD3+ CD4+ CD8+ T cells (pg. 992, col. 1, pgph 3; pg. 992, Materials and Methods; pg. 995, Table 1). Applicant argues that the teachings of the cited prior art do not render obvious claim 22. However, it is again noted that the limitations noted by applicant in the specification are not present in the claims as presently drafted. Applicant argues that there was no motivation for one of ordinary skill in the art to modify the teachings of Jaleco et al. It is again noted that the claims are drawn to an in vitro system that produces specific T cell subtypes, including those taught by Jaleco et al. The practitioner would be motivated to use the OP-9 cells taught by Nakano et al because the presence of M-CSF can inhibit the differentiation of ES cells to blood cells other than macrophages.

Anoop Singh,  
AU 1632